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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,135	12/15/2004	Rainer Schmidt	KW-10PCT	5273

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EXAMINER	
KUHN, MART K	

ART UNIT	PAPER NUMBER
3637	

MAIL DATE	DELIVERY MODE
11/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/518,135	SCHMIDT, RAINER	
	Examiner	Art Unit	
	Mart K. Kuhn	3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 February 2007* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10 September 2007 has been entered.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the means for switching off and the electronic control, both recited in claim 1, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections—35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1–7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The subject matter of the new limitation in claim 1 regarding "means for switching off automatically" is discussed in the specification at page 4, lines 7–10, which is phrased so ambiguously that it does not convey that Applicant had possession of the claimed invention. The combination of "when" and "and/or" make the meaning of the indicated portion of the specification impossible to determine. It is unclear whether the "and/or" is intended to signify that there are two possibilities for the behavior of the motor ("the motor switches itself off ... and/or a reversal of the motor takes place"), or whether it signifies two possible conditions for the motor switching off automatically (*i.e.*, upon a cable going slack and/or upon the reversal of the motor by an electronic control). See also the related rejection under 35 U.S.C. 112, second paragraph, set forth below.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1–7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 1 recites the limitation "wherein the motor comprises means for switching off automatically when at least one cable is relieved and/or an electronic control reverses the motor." The combination of "when" and "and/or" in the limitation is ambiguous and makes the scope of the claims indefinite. It is unclear whether the "and/or" is intended to signify that there are two possibilities for what the motor includes ("the motor comprises means for switching off automatically ... and/or an electronic control"), or whether it signifies two possible conditions for activating the means for switching off automatically (*i.e.*, upon a cable going slack and/or upon the reversal of the motor by an electronic control). The specification (see the related rejection under 35 U.S.C. 112, first paragraph, set forth above) does not clear up the ambiguity either, and in fact compounds it. For the purposes of this examination, the claim language is taken to mean that the motor switches itself off when either of two things occur: a cable is relieved, and/or an electronic control reverses the motor.

8. Claim 4 recites the limitation "the means" in line 2. There is insufficient antecedent basis for this limitation in the claim, as "means" are previously recited in claim 1, line 13, and claim 2, line 2, and it is unclear which means is intended. For the purposes of this examination, claim 4 is considered as referring to the means which interacts with the guide rails, as recited in claim 2.

Claim Rejections—35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1, 2 and 4, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bräuning, WIPO publication WO 00/24290, in view of Cappel, US patent 3,339,795, and either Huffman, US patent 5,366,203, or Riley, US patent 2,875,012. Bräuning teaches a height-adjustable working table having at least two guide rails (20) for receiving a worktop (3), the height of which is adjustable by means of a motor-driven cable drive (7) having a cable drum (71) and a pull cable (72); wherein the worktop is mounted displaceably on the guide rails such that it can move downward by virtue of its own weight, in that cable tension and gravity provide opposing vertical forces; and the cable drum and drive are positioned directly below the worktop (Fig. 2), and thus in the region of the worktop. Bräuning, though teaching means (74, 75) for connecting cabling to the upper ends of the guide rails, does not teach attachment means with which an end of each of plural pull cables is attached by a plug at the upper ends of the guide rails. Cappel teaches a height-adjustable structure having a worktop (30) adjustable in its working height by a driving means (70) driving a cable drum (52, 54, 56) with pull cables (38), an end of each pull cable being attached by a plug (40, 42, 44) at an upper end (46) of the support structure (10). The height-adjustable table of Bräuning differs from the claimed table by the substitution of one cable arrangement for another; and it is noted that both a single drum with a single cable, as taught by Bräuning, and a single drum with plural cables plugged to a support structure, as claimed and as taught by Cappel, are known in the art along with their functions. One of ordinary skill in the art could have substituted the known cable arrangement of Cappel for the cable arrangement of Bräuning, and the results would have been predictable: a working table with a single motor controlling a drum with plural cables thereon.

Bräuning and Cappel do not teach a motor having means by which it automatically switches off when a cable is relieved and/or when an electronic control reverses the motor; thus, the claimed means for switching off the motor can be seen as an improvement on the table of Bräuning as modified by Cappel.

Huffman teaches a comparable height-adjustable device having a motor (28) driving a cable drum (30) with a plurality of cables (20, 22) raising and lowering a work surface (24); and further including means (78) for switching off the motor when a cable is relieved (see, *e.g.*, column 6, lines 41–48; column 11, lines 3–24). Thus, the device of Hoffman is improved in the same way as the claimed invention. One of ordinary skill in the art could have applied the known means for switching off when a cable is relieved, taught by Huffman, in the same way to the table of Bräuning, already modified by Cappel, and the results would have been predictable. The claimed table would have been obvious.

Similarly, Riley teaches a comparable height-adjustable device having a motor (50) driving a cable drum (52) with a plurality of cables (57, 67) raising and lowering a work surface (14); and further including means (88, 92) for switching off the motor when an electronic control (78) reverses the motor (see column 3, line 72–column 4, line 10). Thus, the device of Riley is improved in the same way as the claimed invention. One of ordinary skill in the art could have applied the known motor-reversing control and means for switching off the motor, taught by Riley, in the same way to the table of Bräuning, already modified by Cappel, and the results would have been predictable. The claimed table would have been obvious.

Regarding claims 2 and 4, Bräuning further teaches a working table having means (40) interacting with the outer surfaces of the guide rails, which are front and rear rollers.

11. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bräuning, Cappel, and Huffman or Riley as applied to claims 1 and 4 above, and further in view of Jackson, US patent 4,553,726. Bräuning, Cappel, Huffman and Riley teach a working table substantially as claimed, but do not teach guide rails designed as rectangular tubes. However, Jackson teaches a vertically adjustable platform (2) supported by rollers (40, 50) engaging a guide rail (4), wherein the guide rail is a rectangular tube (column 3, lines 1–2). It would have been obvious, to one of ordinary skill in the art at the time the invention was made, to modify the working table of Bräuning, already modified by Cappel and Huffman or Riley as above, by using rectangular tubes for guide rails, as taught by Jackson, for the purpose of providing a wide bearing surface for the rollers.

Regarding claim 5, Bräuning teaches front and rear rollers, but Bräuning, Cappel, Huffman and Riley do not teach front and rear rollers bearing against the outside surface of the guide rails with the front roller below the rear one. However, the front (50) and rear (40) rollers of Jackson bear against the outer surface of the guide rail (Figs. 1, 2), with the front roller below the rear one (column 3, lines 41–48). It would have been obvious, to one of ordinary skill in the art at the time the invention was made, to modify the working table of Bräuning, already modified as above, by having the rollers bear against the outer surface of the guide rails with the front roller lower than the rear roller, as taught by Jackson, for the purpose of effectively counterbalancing the torque from the cantilevered worktop.

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bräuning, Cappel, and Huffman or Riley as applied to claim 4 above, and further in view of MacKay, US patent 3,411,464. Bräuning, Cappel, Huffman and Riley teach a working table substantially as claimed, but do not teach rollers bearing against the inside surface of the guide rails with the

front roller above the rear one. However, MacKay teaches a vertically adjustable platform (33) supported by front (27) and rear (30) rollers bearing against channels (24, 25) defined on the inner surface of guide rails (13, 14), wherein the front roller is above the rear roller (Fig. 1). It would have been obvious, to one of ordinary skill in the art at the time the invention was made, to modify the working table of Bräuning, already modified by Cappel and Huffman or Riley as above, by making the rollers bear against the inner surface of the guide rails with the front roller above the rear one, as taught by MacKay, for the purpose of constraining the rollers to fixed paths and effectively counterbalancing the torque from the cantilevered work platform.

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bräuning, Cappel, and Huffman or Riley, as applied to claim 4 above, and further in view of Wolfe, US patent 2,749,196. Bräuning, Cappel, Huffman and Riley teach a working table substantially as claimed, but do not teach rollers with ball bearings. However, Wolfe teaches an adjustable table (44) supported by rollers (40) engaging a guide rail (14), wherein the rollers contain ball bearings (column 3, line 9). It would have been obvious, to one of ordinary skill in the art at the time the invention was made, to modify the working table of Bräuning, already modified by Cappel and Huffman or Riley as above, by using ball bearings in the rollers, as taught by Wolfe, for the purpose of allowing the platform to travel smoothly along the guide rail, and because the use of ball bearing rollers is well known in the art as evinced by the use by Wolfe.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and is cited on form PTO-892 enclosed herewith.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mart K. Kuhn whose telephone number is (571) 272-8926. The examiner can normally be reached on M–F, 8:30am–5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MKK MKK
14. November 2007

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